

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH80M 155277-1218 - Diesel Engine

Sample No: LH0191253

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



SAMPLE INFORMATION

Sample Number	LH0191253	LH0191255	LH0243741	---
Sample Date	01 Mar 2024	11 Feb 2024	18 Jan 2024	---
Machine Hours	850	600	362	---
Oil Hours	250	238	221	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

NUCOR STEEL

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OIL CONDITION

Visc @ 100°C	cSt	11.8	12.1	12.2	---
Base Number (BN)	mg KOH/g	12.8	7.1	7.3	---
Oxidation (PA)	%	49	59	76	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.1	0	---
Nitration (PA)	%	89	73	73	---
Sulfation (PA)	%	45	52	60	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	7	6	7	---
Sodium	ppm	2	2	4	---
Potassium	ppm	0	3	4	---



WEAR METALS

Iron	ppm	5	1	4	---
Copper	ppm	1	2	6	---
Lead	ppm	0	0	<1	---
Tin	ppm	1	<1	<1	---
Aluminum	ppm	1	<1	2	---
Chromium	ppm	0	0	<1	---
Molybdenum	ppm	1	0	8	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	0	<1	<1	---
Vanadium	ppm	0	0	<1	---



ADDITIVES

Calcium	ppm	3388	1161	1212	---
Magnesium	ppm	288	685	731	---
Zinc	ppm	1094	763	804	---
Phosphorus	ppm	950	690	744	---
Barium	ppm	0	0	0	---
Boron	ppm	186	87	108	---

Depot: NUCNOR
Unique No: 10914220
Signed: Don Baldrige
Report Date: 08 Mar 2024



GRAPHS

